

Jeopardy Assessment

Proposed Incidental Take Authorization: Army Lake Boat Launch (ITA 345)

Species: Forked Aster and Blanchard's Cricket Frog

Location: Walworth County

Background

Project Information

This project involves the creation of a paved motor boat access site on Army Lake, located in East Troy, Walworth County. The project includes the building of a concrete motor boat ramp, concrete pier interface, installation of a 40' boarding pier, resurfacing and widening of existing parking area and entrance roadway, and paving of a turn around area near the boat ramp, ADA accessible parking stall, and the quarter mile long roadway and approach prior to the boat ramp. Approximately 100 linear feet of suitable Forked Aster habitat, and 0.01 acres from boat ramp creation of suitable Blanchard's Cricket Frog habitat will be impacted during construction. Previous site disturbance has already occurred as a result of this project. Any take of the two species that occurred already is not covered under this Incidental Take Authorization (ITA). This ITA only legally covers take of these species from the date the ITA is issued and forward.

Current land use within the project boundary is of a public boat access site consisting of 989 feet of shoreline being upland with gravel substrate, glacial till deposits with oak savannah, shoreline, and wetlands on the approaching roadway. The current construction area had previously been a private fish camp since the 1940's and maintained for lake access, with the currently maintained area following the existing footprint. The public access area, purchased by the State in 2012, is populated primarily by red oak, birch, and tamarack trees, with several species of wetland and prairie grasses.

Species Information

Forked Aster is a Wisconsin Threatened plant found exclusively in the southeast portion of the state in dry-mesic to mesic hardwoods, often adjacent to lakes or streams, or on slopes with dolomite near the surface. Globally, it is considered a regional endemic, limited to six Midwestern states, and is rare throughout this small range. It is listed as endangered by the International Union for Conservation of Nature (IUCN). Blooming occurs early August through early October; fruiting occurs late August through early October. The optimal identification period for this species is late August through late September.

Forked aster is threatened mainly by loss or degradation of habitat, though characteristics of its life history exacerbate these stressors. Flower production is low under closed canopy conditions (i.e., degraded savannas and woodlands), and plants are generally thought to be self-incompatible. Both factors lead to low seed production. Fragmentation of Forked Aster populations limits gene flow between populations and has led to mostly vegetative reproduction. Seedling establishment is also rare because plants need a particular set of conditions that are currently very uncommon in southeast Wisconsin. Genetic variation is also considered to be low across populations due to recent bottlenecks.

Avoiding known individual plant locations and conducting operations when they are least likely to cause damage is recommended to prevent take of this species. Ideally, projects that have the potential to result in take of forked aster would be conducted during frozen, snow-covered ground conditions. However, in areas of the state where frozen conditions are unreliable, very dry soils late in the growing season might be the best available alternative.

The Blanchard's Cricket Frog is a Wisconsin Endangered species, and prefers ponds, lakes, and a variety of habitats along and adjacent to streams and rivers including, marshes, fens, sedge meadows, low prairies, and exposed mud flats. The species tends to breed in quiet water (no or low flow) and may also move from streams and rivers to adjacent wetlands and ponds. Cricket frogs cannot tolerate freezing or complete inundation for more than 24 hours during the winter and thus seek a variety of microhabitats that provide suitable overwintering conditions, including crayfish burrows, small mammal burrows, rotted-out root channels, seepage areas where groundwater flow prevents freezing at the surface or spaces created by sloughing streambanks. Cricket frogs are active from early March through November. Breeding can occur from mid-May through mid-August, with some larvae not transforming until late September.

Conservation Measures

Since this project may result in take of state-listed species, minimization measures are necessary to reduce the duration, intensity and/or extent of the impacts that cannot be completely avoided. Further, because habitat for the Forked Aster will be permanently lost mitigation measures will be necessary.

General Project Measures

1. All individuals working on the project site (e.g., engineers, construction crew, biologists) will be briefly trained on how to identify forked aster and Blanchard's cricket frogs and instructed on the general conservation measures associated with the Incidental Take Authorization, including what to do if forked aster or cricket frogs are observed within the project area.

Forked Aster - Minimization Measures

2. All borders of identified Forked Aster patches have been surrounded by barrier fencing. This fencing will remain in place throughout the entirety of this project, and its status will be regularly checked and maintained to prevent potential intrusion into the habitat area. As mentioned above, during the course of construction some Forked Aster plants may be damaged, but the fencing will alert staff of the rare plant location and minimize take to the extent possible.
3. The small population of Forked Aster west of the boat ramp will be moved in the fall of 2019 by a technician with experience moving plants. Care will be taken to minimize soil disturbance both when removing the plant initially and placing them in their new location. Hay mulch will be placed on top of the plants after they are moved to prevent frost heave. Forked Aster plants in or within 5ft of the pier footprint should also be transplanted if these plants comprise over 33% of the Forked Aster patch in that area. All transplanted Forked Aster plants will be moved to suitable habitat (i.e., partial shade near base of upland slope but above saturated soil) within the WDNR-owned land at Army Lake. The location of transplanted Forked Asters will be marked with flagging on a stake or nearby tree or shrub so success can be monitored in the spring. GPS coordinates of the transplanted Forked Asters will be sent to the WDNR Bureau of Natural Heritage Conservation Botanist. Any questions about suitable Forked Aster habitat or transplanting techniques should be directed to the WDNR Bureau of Natural Heritage Conservation Botanist as well.
4. The size and location of the ADA stall as well as the width of the road between the ADA stall and the boat ramp will be narrowed to the extent possible to minimize impacts to Forked Aster stems while still meeting the needs of site users.

Forked Aster – Mitigation Measures

5. The site features man made foot traffic trails from prior owners. These trails will be abandoned and closed post construction to limit the amount of habitat disturbance from site users. Permanent fencing will be placed along the roadways on the upland island (i.e., not in the tamarack wetland), around the ADA stall, and across any former trails to close public access from areas outside the road, boat ramp, pier, and immediately adjacent shoreline. Fencing should not impact driving along the roads but rather limit foot traffic into the uplands to protect the Forked Aster and preserve the high quality condition of the site.
6. Upon completion of the project, all areas of temporary disturbance will be restored to pre-existing (or better) condition. In particular, native plant seed (including Forked Aster seed) collected on site will be scattered in the disturbed footprint of the silt fence that was placed through a Forked Aster patch on the west side of the traffic circle.

Blanchard's Cricket Frog

7. Any Blanchard's cricket frog observed in the disturbance footprint will immediately be removed from the area. All individuals removed will be recorded (total number of each species and date removed) and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
8. All dead Blanchard's cricket frogs found on site throughout the course of the project must be recorded (species, approximate age, possible cause of death), photographed, and reported to the Endangered Resources Review Program (DNRRERReview@wi.gov) at the conclusion of the project.
9. For work in the water, cricket frog removals will be conducted within the coffer dam by a qualified biologist after the area has been dewatered. All cricket frogs (and preferably other amphibians and reptiles) found will be immediately removed from the disturbance area and relocated to suitable habitat outside of the project site. If cricket frogs are found on the first walk-through of the area, a second walk-through will be conducted. This process should continue until the biologist feels confident he/she has removed as many cricket frogs as possible from the disturbance area.
10. The biologist conducting the cricket frog removals must have field experience with the cricket frog and its habitat and possess a valid Endangered/Threatened (E/T) Permit or similar authorization for cricket frog removals.
11. Plastic or polypropylene netting associated with erosion matting (also known as an erosion control blanket or erosion mesh netting) without independent movement of strands can easily entrap snakes and other wildlife moving through the area, and cause dehydration, desiccation, and eventually mortality. Biodegradable jute/twine netting with the "leno" or "gauze" weave (contains strands that are able to move independently) has the least impact on snakes. If erosion matting will be used for this project, use the following matting (or something similar): American Excelsior "FibreNet" or "NetFree" products; East Coast Erosion biodegradable jute products; Erosion Tech biodegradable jute products; ErosionControlBlanket.com biodegradable leno weave products; North American Green S75BN, S150BN, SC150BN or C125BN; or Western Excelsior "All Natural" products.

Please note that brand/trade names are provided for reference purposes only and are not an endorsement or rejection of any specific product.

12. Upon completion of the project, all areas of temporary disturbance will be restored to pre-existing (or better) condition.

Jeopardy Assessment

The proposed activity will minimize and mitigate impacts to the forked aster and Blanchard's cricket frog and as a result, we anticipate that take of these species will be low. The department has determined that the proposed activity is not likely to jeopardize the continued existence and recovery of the forked aster or Blanchard's cricket frog, or the whole plant-animal community of which they are a part, within this state and the activity is not likely to result in the destruction or adverse modification of a habitat that is critical to the continued existence of these species within the state. The department has also determined that the proposed activity provides a benefit to public health, safety or welfare that justifies the activity.